

## **ABSTRACT**

A method and apparatus for transforming wide angle video into perspective corrected viewing zones which either a single user or multiple users may select, orient and magnify. The present invention first captures a wide angle digital video input by any suitable means. The captured image is then stored in a suitable memory means so portions of the image may be selected at a later time. When a portion of the stored video is selected for viewing, a plurality of discrete viewing vectors in three dimensional space are chosen on the video input and transformed to a plurality of control points in a two dimensional plane or any other suitable surface. The area between these points which is still warped from the original wide angle image capture is then transformed to a perspective corrected field of view. The perspective corrected field of view is then displayed on a suitable displaying apparatus, such as a monitor or head mounted display.